AMENDMENTS TO THE CLAIMS

The following claims replace all previous versions and listings of claims in the present patent application.

Listing of Claims

1. (previously presented) Submarine actuator for the actuation of a submarine device comprising a container body from which a drive shaft projects that is suitable for inserting in a seat of said submarine device and suitable, through its rotation, for actuating said submarine device, said shaft is moved by at least one electric motor arranged inside said container body and actuated by an electric control signal generated by a remote control station, characterized in that said container body comprises a box-shaped element, inside which at least one electric motor and said drive shaft are arranged, and a substantially cylindrical element inside which there is an electronic control board for said at least one motor.

2. (original) Actuator according to claim 1, comprising two electric motors suitable for moving said drive shaft independently from each other.

3. (previously presented) Actuator according to claim 1, wherein the substantially cylindrical element is a hermetic container into which a pressurised gas, for example nitrogen, is inserted.

4. (original) Actuator according to claim 2, wherein said motors are couplet with the drive shaft through a gear mechanism, which comprises a transmission shaft, connected through a pair of gears to the rotation shafts of the two electric motors, on such a transmission shaft a worm screw being foreseen, integral with the rotation of said shaft, which engages with a further sprocket made on the extension of said drive shaft inside said container body.

5. (original) Actuator according to claim 1, comprising a device for the compensation of the external pressure comprising a membrane accumulator, firmly connected on a side of said box-shaped element that injects pressurised oil inside it through an inlet pipeline, in order to equalise the internal pressure and the external pressure.

6. (original) Actuator according to claim 1, wherein said drive shaft completely crosses the box-shaped element and, on its upper end, a visual recognition device of the position taken up by the submarine device controlled by the movement of the drive shaft is made.

7. (original) Actuator according to claim 6, wherein on such an upper end of the drive shaft a seat is formed for the insertion of a possible robotised arm suitable for rotating the drive shaft in an emergency situation in which it is not possible to actuate the drive shaft electrically.

8. (original) Actuator according to claim 1, wherein the power supply of said at least one electric motor can be carried out through a suitable power supply cable transported by the remote control station to the submarine actuator.

9. (original) Actuator according to claim 1, wherein the electrical power supply of said at least one electric motor can be directly obtained from electrical power supply lines associated with the controlled submarine device.

10. (new) A system, comprising:

a submersible actuator, comprising:

a first housing having an electric motor disposed in a first fluid; and

a second housing having a control circuit disposed in a second fluid, wherein the second fluid is different from the first fluid, the control circuit is coupled to the electric motor, and the control circuit is configured to communicate with a remote control station.

11. (new) The system of claim 10, wherein the second fluid is a pressurized gas.

12. (new) The system of claim 10, wherein the submersible actuator comprises another electric motor coupled to the control circuit, and the control circuit is configured to control the electric motors independent from one another.

13. (new) The system of claim 12, wherein the electric motors are independently drivingly coupled to a drive shaft via a transmission.

14. (new) The system of claim 13, wherein the transmission comprises a transmission shaft, a worm screw coupled to the transmission shaft, and a sprocket coupled to the worm screw and the drive shaft, wherein the electric motors are coupled to the transmission shaft.

15. (new) The system of claim 10, comprising a pressure balancing device coupled to the submersible actuator and configured to balance internal and external pressures.

16. (new) The system of claim 13, wherein the pressure balancing device is coupled to the first housing and is configured to balance internal and external pressures of a liquid.

17. (new) The system of claim 10, wherein the first fluid is an oil and the second fluid is nitrogen.

18. (new) The system of claim 10, comprising a flow control mechanism coupled to the submersible actuator.

19. (new) The system of claim 18, wherein the flow control mechanism comprises a valve, or a pipeline, or a combination thereof.

20. (new) A method, comprising:

pneumatically pressurizing a control circuit in a first enclosure portion of a submersible actuator; and

hydraulically pressurizing at least one electric motor in a second enclosure portion of the submersible actuator, wherein the control circuit is coupled to the at least one electric motor.

21. (new) The method of claim 20, comprising receiving an electrical control signal from a remote control station, processing the electrical control signal in the control circuit, and triggering the electric motor to actuate a submerged flow control mechanism.

22. (new) The method of claim 20, wherein the at least one electric motor comprises first and second electric motors, and the method further comprises independently controlling the first and second electric motors to enable independent actuation of a submerged flow control mechanism.